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ABSTRACT

Postings, accounts receivable and payable, and payroll entries made while using a bookkeeping machine make up the course content described in this pamphlet. The course seeks to prepare students to operate accounting machines as a prerequisite to the operation of more complex machines and adult, on-the-job training. Course guidelines, objectives, content, learning activities, evaluative instruments, student and teacher resources, and test materials are provided. (NH)

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AUTHORIZED COURSE OF INSTRUCTION FOR THE QUINMESTER PROGRAM

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BOOKKEEPING MACHINES

Business Education—7718.04 (New: 7743.04)

CE 001873

DADE COUNTY PUBLIC SCHOOLS

DIVISION OF INSTRUCTION • 1971

ED 095319

BOOKKEEPING MACHINES

7718.04 (New: 7743.04)

Business Education

Written by Jane McShane
And Approved by the Business Education Advisory Committee
For Quinmester Courses

for the

DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, FL 33132
1972

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I. COURSE TITLE—BOOKKEEPING MACHINES

II. COURSE NUMBER—7718.04 (New: 7743.04)

III. COURSE DESCRIPTION

A. Synopsis
Students will use a bookkeeping machine to make postings to accounts receivable, accounts payable, and payroll, and for other special applications for which the machine is suitable.

B. Textbook
Because accounting machines vary in design and operational functions, the manufacturer's manual for the specific equipment should be used as the primary text. Supporting materials are listed in Sections IX and X.

C. Occupational Relationships

Accountant	Bookkeeping Machine Operator
Accountant, Junior	Calculating Machine Operator
Accounting Clerk	Cashier
Adjustment Clerk	Credit Clerk
Audit Clerk	General Office Clerk
Billing Clerk	Payroll Clerk
Bookkeeper	Tabulating Machine Operator
	Teller

D. Rationale
The machines used in this course are desk models NCR 60 or 160, the Burroughs 600, or similar models. Students who have a high degree of skill on any one of these machines will be able, in a brief period of time, to operate complex accounting machines with training in an adult program or on the job.

IV. COURSE ENROLLMENT GUIDELINES

A. Prior Experiences Needed
The student will understand better the procedures of this course if he has attained the objectives of Adding-Listing Machines (7718.01) and Completing the Bookkeeping Cycle (7708.31) prior to enrollment in this course.

B. Pretest
This test should be used to determine whether the student has attained (a) the objectives of the preceding courses and (b) the objectives of this course. Successful completion of (b) would indicate that the student should elect another course.

V. COURSE OF STUDY PERFORMANCE OBJECTIVES

Upon successful completion of this course, the student will be able to—

V. COURSE OF STUDY PERFORMANCE OBJECTIVES, Continued

1. open and post charges to individual accounts receivable using given documents such as sales slips, invoices, or lists of transactions;

2. post credits to accounts receivable from given documents such as cash receipts, checks, credit memorandums, or lists;

3. verify and post the accounts receivable control daily from given information;

4. post increases to individual accounts payable based on given source documents such as invoices, purchase orders, bills, or lists;

5. post decreases to individual accounts payable based on given documents such as vouchers, check stubs, purchase return memorandums and discount information;

6. verify and post the accounts payable control daily from given information;

7. calculate, check, and post information to a payroll journal from given payroll sheets and time cards (if a payroll program bar is available);

8. post the totals to various payroll ledger accounts from information on the payroll journal;

9. find and correct all posting errors using an acceptable procedure; and

10. identify vocabulary terms and machine parts by matching them with a list of their descriptions, functions, or definitions.

VI. COURSE CONTENT

A. Equipment and Supplies
   1. Basic needs
      a. Modern bookkeeping machine with
         (1) Visible answers or dials
         (2) Symbol keys
         (3) Two total capacity
         (4) Movable paper guides
         (5) Platen spacing levers and locks
         (6) Reverse key
         (7) Vertical space motor bar
         (8) Automatic credit balance (printed red)
         (9) Date lock mechanism
         (10) Interchangeable program bars for
            (a) Accounts receivable and payable applications
            (b) Payroll—four deduction application

VI. COURSE CONTENT, Continued

b. Machine stand or table 26" high with working space on each side of the machine
c. Chair with bookrack
d. Text or substitute operational information
e. Source documents, practice sets, etc.
f. Adding machine tape
g. Ledger and statement forms
h. Journal pages, time cards, and payroll forms
i. Current withholding and FICA schedules

2. Supplementary needs
   a. Posting trays
   b. Index sets
   c. Wall charts of machines
   d. Carbonized ledger and statement forms

B. Introduction to Bookkeeping Machine
1. Review of basic accounting principles and terms
   a. Journal
   b. Accounts receivable ledger
   c. Accounts receivable control
   d. Accounts payable ledger
   e. Accounts payable control
   f. Payroll records
      (1) Time card
         (a) Hours worked
         (b) Gross earnings
         (c) Deductions
         (d) Net earnings
      (2) Employee's earnings record
      (3) Pay check and statement
      (4) Payroll journal
      (5) Ledger accounts
   g. Tax laws affecting payrolls
      (1) Federal income tax
      (2) FICA
      (3) Federal and state unemployment taxes
   h. Government records and reports
2. Advantages of machine over manual systems
   a. Machine posting is fast
      (1) Statement, ledger, and journal are posted in one operation
      (2) Amounts are added and subtracted automatically
      (3) Balances are computed and printed automatically
      (4) Dates and zeros are printed automatically
      (5) Carriage returns and opens automatically after each posting
   b. Duplicating of work is eliminated
      (1) Figures are handled only once
      (2) Statement is prepared as a by-product of posting the ledger
      (3) Account balances are computed, printed, and proved daily

VI. COURSE CONTENT, Continued

c. Ledger and statements are proved daily
   (1) Built-in machine proof keeps posting errors to a minimum
   (2) Errors can be detected and corrected immediately
   (3) Statements are always correct
   (4) Books are always in balance
   (5) Trial balance worries are eliminated
d. Balances are always up to date
   (1) Account balances are up to date and accurate every day of the month
   (2) Improved customer service is possible when handling inquiries
   (3) Up-to-the-minute credit authorization and quick follow-up of past-due accounts is possible
   (4) Total accounts receivable figures are always available
e. Month-end work load is eliminated or reduced
   (1) Time spent preparing statements and balancing accounts is eliminated
   (2) There is no need to close books early
   (3) Costly overtime is no longer required
f. Statements are always ready for mailing
   (1) Can be mailed any day of the month
   (2) Prompt statements encourage prompt payments
   (3) No need to take time to verify correct balances
g. Records always agree
   (1) Statement, ledger, and journal are posted simultaneously for greater speed and accuracy
   (2) Balances are always correct
   (3) Journal shows entire month's postings
h. Statements are neat and easy to read
   (1) Machine printed figures are clear, sharp, and distinct
   (2) Credits and credit balances are printed in red
   (3) Business-like appearance promotes customer confidence
   (4) Reflects an efficient record-keeping system

3. Identification of and uses for machine parts
   a. Carriage control levers
      (1) Paper guides
      (2) Carriage opening device
      (3) Paper lock device
      (4) Platen spacing lever
      (5) Tabulating control
         (a) Space up with tab
         (b) Space up with no tab
         (c) No space with tab
      (6) Line finder guide
   b. Date, date repeat, and date release keys or levers
   c. Description or symbol keys
   d. Operating controls
      (1) Plus or add bar
      (2) Minus or subtract bar
      (3) Skip bar

VI. COURSE CONTENT, Continued

(4) Vertical spacing control
(5) Return key for multiple posting
(6) Non-add or reference key
(7) Correction or error key
(8) Reverse bar
(9) Subtotal bar
(10) Total bar (A)
(11) Grand Total (B)

4. Organization of work area
   a. Machine placement
   b. Posting media placement
   c. Posture

C. Accounts Receivable—Direct Proof System
   1. Opening accounts
   2. Posting charge sales
   3. Posting multiple charge sales
   4. Posting sales returns and credit memorandums
   5. Posting cash receipts and discounts
   6. Posting sales to credit balance accounts

D. Accounts Payable—Direct Proof System
   1. Opening accounts
   2. Posting credit purchases
   3. Posting purchase returns, debit memorandums
   4. Posting cash payments and discounts

E. Payroll System
   1. Computing time cards, hours, and gross pay
   2. Computing taxes, deductions, and net pay
   3. Posting payroll journal and ledger accounts

VII. SUGGESTED PROCEDURES, STRATEGIES, AND LEARNING ACTIVITIES

A. Course Strategy and Method

The methodology used in this course should be directed toward providing the student with a knowledge of basic accounting machine applications and a working knowledge of basic procedures, with emphasis toward developing a marketable skill. This course should provide an excellent opportunity for boys as well as girls to learn a skill needed for entry into office work.

Operational manuals and/or teacher-prepared instruction sheets for each model of machine giving detailed step-by-step directions for the various operations should be available to the student at all times. If these materials are provided in loose-leaf form with each page encased in plastic, a durable, flexible and easily replaceable arrangement can be constructed.

The student should be encouraged to develop self-reliance and to work independently by reading and following printed directions.

Because the size of the machine and its complex appearance may cause some initial apprehension on the part of the student, it would be advisable for the teacher to reassure the student by supervising him as he reads and executes the directions one step at a time for the first two or three transactions.

B. Individualized Instruction

Because senior high schools have a limited number of bookkeeping machines (from one to five), instruction will necessarily be on an individual basis.

1. Pretest

A diagnostic test based on understandings of the bookkeeping cycle as it pertains to accounts receivable, accounts payable, and payroll should be administered.

A second section of the pretest should deal with fundamental operations of a full-key adding machine. The teacher should observe the student to see if he used simultaneous-key depression techniques and/or "up-the-keyboard" addition.

A third section should consist of parts taken from various tests administered throughout this course to determine if the student can perform successfully the predetermined objectives of this course. If he can, he should be counseled to elect another course. A sample test can be found in the Appendix.

2. Basic review

The results of the pretest will identify areas of strength and weakness for each student and will determine where the student will need basic review before beginning the actual machine operations.

C. Vocabulary

A list of vocabulary terms and machine parts should be provided and might be assigned for homework. A sample list of terms can be found in the Appendix.

D. Machine Manipulation

1. Keying operations

The teacher should insist that proper techniques always be followed by the student, such as

a. entering entire amount as a unit
b. using entire hand, not one or two fingers, for depressing keys and motor bar simultaneously
c. using tip of little finger on motor bar
d. splitting large amounts
e. depressing up to 3 keys of an amount in one operation
f. using up-the-keyboard technique
g. efficient insertion and removal of forms from machine
h. development of smooth patterns of movement with no waste of effort or motion

2. Error correction

An approved method for correcting posting errors should be established and uniformly used. One method of correction is to immediately reverse the amounts entered in error; another accepted way is to draw a single line through the incorrect entry and correct the accumulated total at the end of the posting run.

E. Instructional Materials

1. Ledger posting only

If carbonized paper and journal entries are not feasible, the machine can be programmed for ledger entries only when working with accounts receivable and accounts payable. The proof pick-up in this instance would be on the adding machine tape on the left of the machine and the instructions for completing the problems would have to be adjusted accordingly. Sample ruled forms for duplicating purposes can be found in the Appendix.

2. Source documents

The value of learning this course through the handling of source documents cannot be overemphasized. It is one of the best methods for the student to see the relationship of the document he is handling to the record he is preparing.

Accounts receivable, accounts payable, and payroll situations should each be introduced with actual source documents. Materials of this kind are not as difficult to obtain as one might assume. The teacher should not overlook the opportunity for such materials from other classes in his own school. Excellent problem sources are used bookkeeping practice sets and completed workbook problems from general business, advanced typing, bookkeeping, and office practice classes.

Teacher-constructed problems are most easily completed on duplicated forms with appropriate headings. One color of paper can be used for invoices, another for credit memorandums, etc. Variety and stationery stores also can be a source of very inexpensive supplies. Portions of such problems can be found in the Appendix.

3. Lists

After the student has become familiar and proficient with the handling of individual source documents, a list of transactions might be used for further development of learning. This would apply especially to accounts receivable and accounts payable situations.

F. Advanced Work

1. Optional problems

If a student completes the minimum assignment satisfactorily within the prescribed time, he should be given additional practice material to complete. The use of carbon when constructing original problems will provide alternate practice material for two students with no additional effort on the part of the teacher.

2. Practice sets

A number of commercial practice sets which are available are listed in Section IX. The Paul Pactor practice set (see Resources for Students) has been found to be a valuable addition to a teacher-constructed problem for a short-term course. The teacher may wish to reduce the number of accounts giving one student a group of names and another student another group.

VIII. EVALUATIVE INSTRUMENTS

A. Testing

1. Pretest

The content of the pretest has been mentioned in Section VII, B. A sample pretest is found in the Appendix.

2. Progress tests

The interim tests should be administered to an individual student when he completes a unit of work and should be the type which will measure the purpose of testing.

VIII. EVALUATIVE INSTRUMENTS, Continued

TYPE OF TEST	PURPOSE OF TEST
Vocabulary test	To determine the student's knowledge of terms, machine parts, and their functions.
Basic procedures test	To determine the student's understanding of machine functions during the posting procedure.
Error correction test	To determine the student's ability to correct errors properly.
Posting test	To determine the student's ability to open accounts, post transactions, and manipulate the machine accurately, speedily, and efficiently.
Theory test	To determine the student's understanding of concepts.

3. Final evaluation

A posttest should include items covering each of the objectives of the course.

B. Grading

There are a number of factors which should be considered when evaluating a student in a bookkeeping machines course. Consideration should be given to a knowledge of the machine and the names and functions of its working parts; an understanding of the posting procedure mechanically as well as its effect on the bookkeeping process; the teacher's observation of the operator's posture, machine manipulation, and records handling. However, the emphasis and greater portion of the grade should be determined by performance. A 30-minute period should be adequate for testing purposes. All tests should be evaluated in terms of accuracy standards established in the performance objectives as well as speed.

Another method for grading performance is to rank the raw scores, determine the mean score, and then assign grades or percentages above and below that point. This method allows the student's accomplishment to be compared with that of other students who have been tested on the same machine.

IX. RESOURCES FOR STUDENTS

A. Textbooks

Carr, Ted D. Bookkeeping Machine Operation Instruction Manual, 1st edition. Milnor, ND: J & M Printing, Inc., 1966.

Bookkeeping Machine Course. Orange, NJ: Monroe Calculating Machine Co., Inc.

Machine Accounting for Accounts Receivable. Orange, NJ: Monroe Calculating Machine Co., Inc.

Accounts Receivable—Direct Proof; Accounts Payable—Direct Zero Proof; Payroll Accounting and Tax Reports. (Modules of series, Introduction to Machine Accounting) Dayton, OH: National Cash Register Co., NCR Education Center—Sugar Camp, 1969.

Operator's Manual NCR 160. Dayton, OH: National Cash Register Co., NCR Education Center—Sugar Camp.

B. Drillbooks

Agnew, Peter L. and Paseward, William R. Full Keyboard Adding-Listing Machine Course. Cincinnati: South-Western Publishing Company, 1963.

Pactor, Paul and Johnson, Mina M. Full Keyboard Adding Machine Course. New York: Pitman Publishing Corp., 1968.

Speed Stroke. Dayton, OH: National Cash Register Co., NCR Education Center—Sugar Camp, 1970.

C. Wall Charts

NCR 160 Bookkeeping Machine. Dayton, OH: National Cash Register Co., NCR Education Center—Sugar Camp.

D. Practice Sets

Archer, F. C.; Schmidt, R. N.; and Stewart, J. R. Accounts Payable Practice Set. Hightstown: Gregg Division of McGraw-Hill Book Co.

Archer, F. C.; Schmidt, R. N.; and Stewart, J. R. Accounts Receivable Practice Set. Hightstown: Gregg Division of McGraw-Hill Book Co.

Cornelia, Nicholas J. and Agnew, Peter L. Machine Office Practice, 2nd edition. Cincinnati: South-Western Publishing Co., 1971.

IX. RESOURCES FOR STUDENTS, Continued

D. Practice Sets, Continued

Nanassy, Louis C. Standard Payroll Project, 5th edition. New York: Pitman Publishing Corp.

Pactor, Paul. Bookkeeping Machines Practice Set. New York: Pitman Publishing Corp., 1961.

E. Reference Manuals

Employer's Tax Guide. Washington, DC: Internal Revenue Service, Dept. of the Treasury, 1972.

History of Accounting. Dayton, OH: National Cash Register Co., Education Center—Sugar Camp.

X. RESOURCES FOR TEACHERS

A. Manuals

Introduction to Machine Accounting, Instructor's Kit. Dayton, OH: National Cash Register Co., Education Center—Sugar Camp, 1969.

Keys for all materials listed in Section IX, Resources for Students, are available from each of the respective publishing companies.

Class 160—Stop Bar Set-Ups, Reference Manual. Dayton, OH: National Cash Register Co., Education Center—Sugar Camp.

B. Audio-Visual Aids

150 overhead transparencies and transparency stage (part of instructor's kit for Introduction to Machine Accounting listed above).

C. Teaching-Learning Aids

Available from National Cash Register Co., Education Center—Sugar Camp, Dayton, OH, 1969:

Tests and quizzes for all modules in Introduction to Machine Accounting series.

Wall chart—NCR 160 Bookkeeping Machine.

D. Periodicals

Balance Sheet, The. Cincinnati: South-Western Publishing Co. Monthly, October through May.

X. RESOURCES FOR TEACHERS, Continued

D. Periodicals, Continued

Business Education World. New York: Gregg Division of McGraw-Hill Book Co. Five issues each school year.

Journal of Business Education. East Stroudsburg, PA: Robert C. Trethaway. Monthly, October through May.

E. Articles

Kallaus, Norman F. and Clark, James L. "Flowcharting: A Graphic Approach in the Machines Classroom," Business Education World. Vol. 51, No. 5 (May-June, 1971), pp. 18-19.

Lovchik, Aaron G. "A Ranking Method of Grading in Office Machines," Business Education World. Vol. 49, No. 8 (April, 1969), pp. 14-15.

APPENDIX

PRETEST

Section 1—Supply the answers asked for or indicated:

1. What is the name of the source document which is the usual basis for accounts receivable records? 1. _____

2. What is the name of the book of original entry in which only charge sales are entered? 2. _____

3. All charge customers are referred to as _____ in the general ledger. 3. _____

4. The accounts receivable control account will normally have a _____ balance. 4. _____

5. If all charge customer accounts are kept together in a separate file or book, what name is used to designate this assortment? 5. _____

6. Accounts payable refer to the _____ of a business. 6. _____

7. The accounts payable control account in the general ledger is classified as a ____ type of account. 7. _____

8. On which financial statement will the accounts payable control account be listed? 8. _____

9. A reduction in the amount owed because of prompt payment is called a _____. 9. _____

10. A financial statement which reports the financial condition of a business on a specific day is called a ____. 10. _____

11. Amounts taken from gross earnings of an employee for specific purposes are referred to as ____. 11. _____

12. What is the common rate for paying an employee overtime wages as compared to regular wages? 12. _____

13. If an employer pays his workers by the hour, the record of the hours worked during a period of time will be kept on a _____. 13. _____

14. The percentage of money that an employer deducts from gross wages for income tax is called a _____ tax. 14. _____

15. FICA is commonly known as _____. 15. _____

PRETEST, Continued

Section 2

Solve the following on a full-key adding machine. Use proper fingering techniques and attach the machine tape to the top of this sheet.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
11.77	38.78	95.11	42.81	965.81	6083.75	27.39
12.13	47.00	13.88	91.72	911.27	793.91	108.05
25.27	66.42	67.31	41.62	984.53	65.82	63.00
27.79	20.01	40.49	57.89	89.50	7.70	486.68
64.40	19.89	21.70	19.37	41.00	627.82	1001.10

(8)	(9)	(10)	(11)	(12)
4.3	1268.17	8497.16	7347.10	4637.12
18.75	- 432.89	- 247.11	- 7411.00	- 8675.68
807.132				
10.638				
412.4				

Use short-cut method where applicable:

(13) 18 x 98 =

(14) 4.132 x .49 =

(15) 153 x 25 1/4 =

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PRETEST, Continued

Sections 1, 2

PAYROLL WORKSHEET *

Perform all calculations on a full-key adding machine. Round off all figures to the nearest cent.

Complete the payroll worksheet and total each column.

Name	Hrs. Worked	Rate	Reg. Hrs.	O.T. Hrs.	Gross	W. Tax	FICA (5.2%)	Pensions (10%)	Tot. Ded.	Net Pay
Arthur Devine	48	2.00	80.00	24.00	104.00	13.70	5.41	10.40	29.51	74.49
Robert Green	52	2.20	88.00	39.60	127.60	18.80	6.64	12.76	38.20	89.40
Allen Orlove	38	2.60	98.80	—	98.80	12.70	5.14	9.88	27.72	71.08
			266.80	63.60	330.40	45.20	17.19	33.04	95.43	234.97

* Circled figures are given to the students; the rest are calculated by them.

PRETEST, Continued

Section 3—Supply the answers asked for:

1-3. List the 3 preliminary steps necessary before beginning the actual posting operation.

1. _____

2. _____

3. _____

4-9. List the 6 steps in order for posting accounts receivable charges or credits.

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. What is a control account and how is it used in machine bookkeeping?

_____

_____

11. Why is it necessary to look one slip ahead when posting to an individual account?

_____

_____

12. How does the posting procedure differ if the old balance is a credit?

_____

_____

13. How does the posting procedure differ if multiple rather than single charges are posted to the same individual account?

_____

_____

PRETEST, Continued

Section 3, Continued

14. When using your machine for adding, what adjustment needs to be made?

_____

15. How can an error be corrected if it is found before posting?

_____

_____

16. How can an error be corrected if it is found immediately after posting?

_____

_____

17. Which device should be used to avoid the necessity of entering the date for each transaction?

_____

18. If the prelist and the total at the end of posting the ledger do not agree, where will you look for a mistake?

_____

Indicate with a plus sign or a minus sign, the mathematical process which takes place in the following carriage positions. Use a "0" to indicate "no change."

19. Old balance _____

20. Date-Ref. _____

21. Credit _____

22. Charge _____

23. New Balance _____

24. Proof Pick-up _____

25. Proof _____

PRETEST KEY

Section 1	Section 2
1. sales slip	1. 141.36
2. sales journal	2. 192.10
3. accounts receivable	3. 238.49
4. debit	4. 253.41
5. accounts receivable ledger	5. 2992.11
6. creditors	6. 7579.00
7. liability	7. 1686.22
8. balance sheet	8. 1253.220
9. cash discount	9. 835.28
10. balance sheet	10. 8250.05
11. deductions	11. 63.90 Cr.
12. 1 1/2	12. 4038.56 Cr.
13. time card	13. 1764
14. withholding	14. 2.02468
15. social security	15. 3.7875

Section 1, 2 PAYROLL WORKSHEET

The completed worksheet figures are found on the form itself.

PRETEST KEY, Continued

Section 3

1. Clear machine

2. Alphabetize posting media

3. Prelist of posting media

4. Pick-up old balance

5. Post date and reference number

6. Post charge or credit

7. Sub-total (new balance)

8. Pick up old balance for proof

9. Total (proof)

10. An account which summarizes the detailed entries of a subsidiary ledger; it is used to check accuracy of daily postings to individual accounts.

11. Because of the possibility of multiple postings to the same account.

12. The old balance is entered with a minus bar and the second balance pick-up is reversed.

13. The return bar instead of the add bar is used for all charges before sub-totaling.

14. The carriage must be locked and allowed to space up.

15. Through the use of the correction key on the keyboard.

16. The entry should be reversed, then entered correctly; or post the entry correctly, draw a line through the incorrect entry, and correct the totals at the end of the posting run.

17. Use the date lock mechanism.

18. In the individual ledger accounts.

19. +

20. 0

21. -

22. +

23. + and/or -

24. -

25. +

VOCABULARY TERMS

ACCOUNT—A bookkeeping form showing increases, decreases, and the resulting balances which affect only one person or thing.

ACCOUNTS PAYABLE—A collection of subsidiary ledger accounts showing the amounts of debts owed by a business to its creditors.

ACCOUNTS RECEIVABLE—A collection of subsidiary ledger accounts showing the amounts owed to a business by its customers.

ACCOUNTS RECEIVABLE LEDGER—All the customer accounts held or filed together.

ALLOWANCES—SALES AND PURCHASES—Credits allowed for shortages, damages in transit, and for defects in merchandise which is not returned.

BALANCE—The difference between the total debit and the total credit postings in an account.

BATCHING—Process consisting of picking out all of the sales slips affecting one customer's account from the total number of sales slips being sorted.

CASH DISCOUNT—An allowance made to a customer for prompt payment.

CASH RECEIPTS JOURNAL—A book of original entry used for recording all receipts of cash on accounts receivable and cash sales.

CHARGE OR DEBIT—An increase in a customer's account.

CONTROL—An account which summarizes the detailed postings that appear on the accounts of a subsidiary ledger. The total of all accounts in a subsidiary ledger must equal the balance of the control account.

CREDIT—A decrease in a customer's account.

CREDIT BALANCE—An excess of credits (machine printed in red) over debits resulting from an allowance for defective merchandise, the return of merchandise, or an over-payment.

CREDIT MEMO—A written notice of an allowance made by a business to one of its customers for merchandise returned or found defective.

CREDITOR—One from whom a business buys merchandise or borrows money on its promise to pay within a reasonable time.

CROSSFOOT—To obtain a balance by adding or subtracting amounts that are listed horizontally on a machine bookkeeping account.

DEBTOR—One to whom a business grants credit.

VOCABULARY TERMS, Continued

DEDUCTIONS—Amounts taken from the gross earnings of an employee for specific purposes.

DISCOUNT—An amount deducted from a stated price or amount.

EMPLOYEE EARNINGS RECORD—A ledger account which summarizes an employee's earnings and deductions.

GENERAL LEDGER—A collection of accounts that summarize changes in the financial condition of a business.

JOURNAL—A book of original entry which contains a written record of the daily transactions of a business.

JOURNAL ENTRY—The first record of a business transaction which forms the basis for postings to specified accounts.

LEDGER TRAY—A receptacle used to hold ledger accounts in an upright position.

MEDIA—Records of business transactions used for posting the accounts. They include copies of invoices, cash slips, credit memos, vouchers, etc.

MEMORANDUM—A business form used to record the receipt or issuance of cash, credit, or merchandise.

MULTIPLE POSTING—A machine bookkeeping procedure which is used to post two or more items to the same account without indexing of the old balance pick-up for each item.

NEW BALANCE—The last figure, in the last column of a machine ledger account after the current posting is made. This, in turn, becomes the "old balance pick-up" for the next posting.

I.S.F.—INSUFFICIENT FUNDS—A bank's notation on a check which must be charged back to a customer's account because of insufficient funds in the customer's checking account.

OLD BALANCE—The last figure in the last column of a machine ledger account before the current posting is made. The "old balance pick-up" is the first step in a machine bookkeeping operation.

OPEN BALANCE—An unpaid balance in a customer's or creditor's account.

OVERTIME—The number of hours an employee works beyond the agreed weekly total set for all employees.

VOCABULARY TERMS, Continued

PAYROLL JOURNAL—An alphabetical listing of all employees showing a summary of gross earnings, deductions, and net earnings for a payroll period.

PICK-UP—The previous balance of an account which is entered in the machine so that a debit may be added or a credit subtracted to obtain the new balance.

POSTING—A process of transferring information from original business papers to machine ledger accounts.

POSTING DATA—The information needed to record business transactions on machine ledger accounts.

POSTING FORMS—The various ledger sheets, journals, and summary forms on which postings are made.

POSTING MEDIA—The business documents, forms and other original records of a transaction that form the basis for machine posting to accounts and journals.

PRELIST—An adding machine listing of the amounts and totals of all items to be posted which is prepared before the actual posting.

PROOF OF POSTING—A procedure followed by a machine bookkeeper to prove that all postings were made for the correct amounts and that the old balances were picked up correctly.

REFUNDS—Cash payments that are usually the result of allowances for defective merchandise, return of goods, or overpayment.

REGULAR TIME—The number of hours an employee is expected to work for basic pay.

REMITTANCES—Cash, checks, money orders, or any other form of exchange that is usually accepted in payment of a debt.

RETURNS, SALES AND PURCHASES—Credits allowed a buyer for merchandise returned to the seller. When the credit is given the customer, it is a Sales Return; when allowed by a creditor, it is known as a Purchase Return.

REVERSING ENTRY—In machine bookkeeping, an entry used to correct an error in posting.

SALES JOURNAL—A book of original entry for recording transactions of merchandise sold on credit.

VOCABULARY TERMS, Continued

SCHEDULE OF ACCOUNTS RECEIVABLE OR PAYABLE—A listing of open balances in the customers' or creditors' ledgers.

SUBSIDIARY ACCOUNTS—Accounts of the same type that are grouped together in one ledger and represented by a summary account in the general ledger, which is called a control account.

UNIT PLAN—Ledger account, statement, and the proof journal are posted simultaneously.

UPDATING—Process of posting the totals of a day's transactions of a subsidiary ledger to the control account.

VOUCHER—A document, form, or business paper which, when properly approved, serves as evidence of the bookkeeper's authority to make an entry.

SYMBOLS ON NCR 160

CS	Cash
DM	Debit memo
CM	Credit memo
DS	Discount
TX	Tax
JE	Journal entry
VO	Voucher
CH	Charge
MS	Miscellaneous

SAMPLE PROBLEM

Your employer has purchased a bookkeeping machine for the purpose of implementing an accounts receivable machine system. The charge customers' account balances at the end of January must be transferred from the hand system now in use to machine records. The accounts are filed in alphabetical order.

Schedule of Accounts Receivable
January 31, 19—

Ralph Burns	16-241	56.50
Allan Freeman	16-417	39.89
B. G. Hancock	18-219	29.30
Mary Little	21-410	48.60
Remac, Inc.	12-123	192.16
William Shader	14-895	32.75

You are instructed to use the above schedule of accounts receivable (list of customers who owe money on a specific date with their balances) for conversion to a machine accounting system.

a. Open the individual accounts on separate ledger and statement forms by writing the name and account number in the heading position.

b. Open another ledger account with the title of "Accounts Receivable Control."

c. Clear the machine. Follow "Machine Procedure for Opening Accounts" on page 28. Total all amounts owed on January 31 by adding on your machine. This procedure is called prelisting. Check the accuracy of your entries on the tape. Keep the tape.

d. Clear the machine. After the machine is cleared, insert the ledger and statement forms and enter the balance of each customer's account in the proper space. Use January 31 as the date for transferring balances.

e. After transferring all customer balances, use "B" and the subtotal key to verify your entries. This figure is the accumulation of all entries posted. Check B subtotal against the total of the prelist (adding machine tape). They should agree. If they do, clear B total. If they do not, it is necessary to locate the error in the postings to the individual ledger accounts.

SAMPLE PROBLEM, Continued

f. After transferring all customer balances and proving the total, insert the journal and clear the machine again on the journal page.

g. Insert the accounts receivable control card and enter the total amount owed by all customers in the balance forward block.

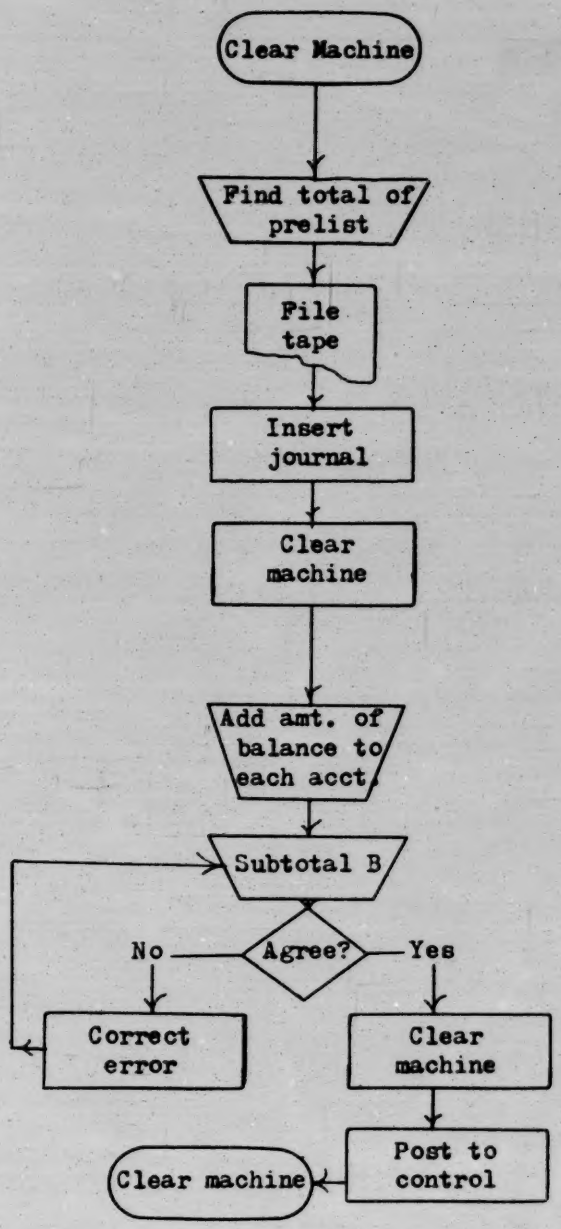
h. File the control card in front of your packet. The customers' ledger and statement forms are filed alphabetically behind the accounts receivable control card.

This completes the process for opening accounts.

A flow chart of the above instructions follows on the next page. Study it!

Transactions continue on page 35.

MACHINE PROCEDURE FOR OPENING ACCOUNTS



Prelist

Move carriage to adding tape position. Lock in place. (Space up, no tab) Depress total for A, then total for B.

Add old balances on schedule. Verify.

File tape in front of individual accounts.

Move carriage to first column on journal sheet.

(Same as above)

Posting Balances

Insert customer forms. Move carriage to balance column and add to balance forward box.

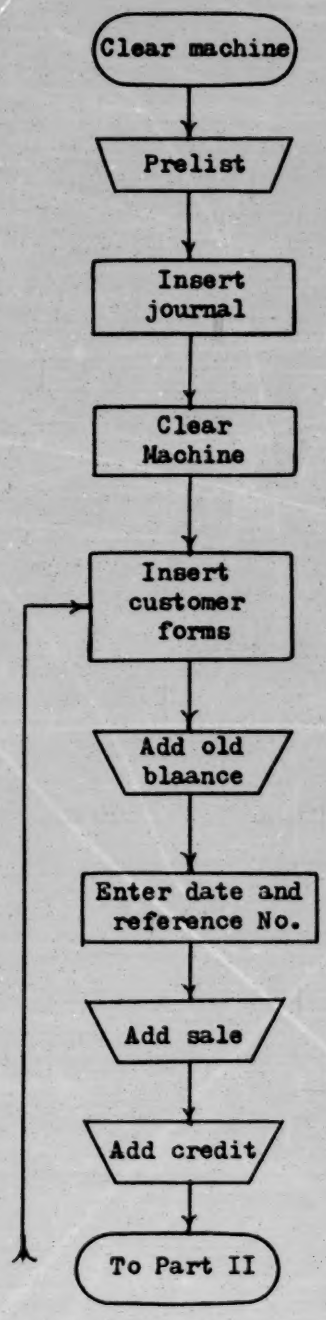
Verify total of postings with total of adding machine tape. If in agreement, total B.

Post total to balance column of control account. File in front of individual acounts. Remove journal.

Problem solved.

MACHINE PROCEDURE FOR

POSTING CHARGE SALES OR CREDITS



(Previous explanations not repeated)

Insert in front of journal, lining up columns.

Record in old balance column. Depress add motor bar.

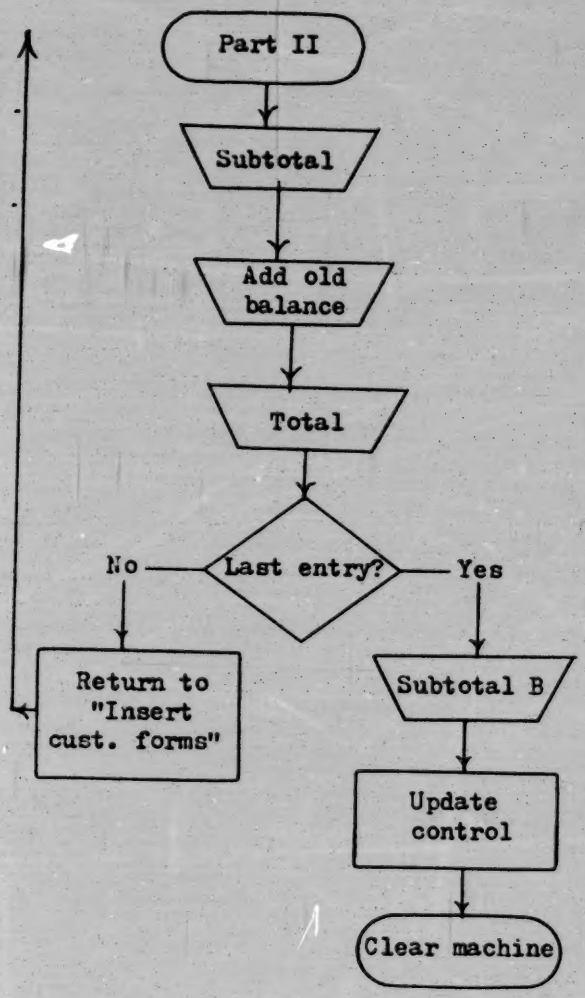
Lock date into machine. Reference, or sales slip number, entered as dollars.

Entered in charge or debit column. Skip of no sale involved.

Entered in credit column. Skip of no credit involved.

Continued next page.

POSTING CHARGE SALES OR CREDITS, Continued



Use ST key

Pick-up proof. Use old balance with which transaction began.

Use total key. Proof column shows amount of sale. Verify with sales slip.

Insert control account and add to debit column.

Problem solved.

SAMPLE PROBLEM, Continued

Using the sales slips which follow, post the total amounts of each slip to the proper individual and control accounts as charges or debits. Follow procedure entitled "Posting Charge Sales."

Date Feb. 1 19—

M A. Freeman

No.

Reg. No. ____ Clerk ___

1	General mdse	7	50
2			
3			
4			
5			
6			
7			
8			
9			
10			

Date Feb 1 19—

M Wm. Slader

No.

Reg. No. ____ Clerk ___

1	Flashlight	3	95
2			
3			
4			
5			
6			
7			
8			
9			
10			

Date Feb. 1 19—

M Thelma Williams

No. 17-438 (New Account)

Reg. No. _____ Clerk _____

1	Cookbook	4	95
2			
3			
4			
5			
6			
7			
8			
9			
10			

Date Feb 1 19—

M Remac, Inc

No.

Reg. No. _____ Clerk _____

1	Paint	15	52
2			
3			
4			
5			
6			
7			
8			
9			
10			

SAMPLE PROBLEM, Continued

Date February 1 19—

M Sue Wolf

No. 20-997

Reg. No._____ Clerk_____

1	Umbrella		6	50
2				
3				
4				
5				
6				
7				
8				
9				
10				

Date February 1 19—

M Mary Little

No.

Reg. No._____ Clerk_____

1	Purse		7	95
2				
3				
4				
5				
6				
7				
8				
9				
10				

Date February 1, 19—

M B. G. Hancock

No.

Reg. No._____ Clerk_____

1	General merchandise		12	39
2				
3				
4				
5				
6				
7				
8				
9				
10				

Date February 1, 19—

M Ralph Burns

No.

Reg. No._____ Clerk_____

1	Hammer		4	95
2				
3				
4				
5				
6				
7				
8				
9				
10				

SAMPLE PROBLEM, Continued

Date February 2 19—

M Ralph Burns

No.

Reg. No. Clerk

1	Shoe	3	50
2	Rake	2	00
3		5	50
4			
5			
6			
7			
8			
9			
10			

Date February 2 19—

M Thelma Williams

No.

Reg. No. Clerk

1	Purse	8	50
2	Wallet	2	50
3		11	00
4			
5			
6			
7			
8			
9			
10			

Date Feb. 2 19—

M Mary Little

No.

Reg. No. Clerk

1	Lingerie	7	95
2			
3			
4			
5			
6			
7			
8			
9			
10			

Credit

Date Feb. 2 19—

M William Shader

No.

Reg. No. Clerk

1	Returned flashlight	3	95
2			
3			
4			
5			
6			
7			
8			
9			
10			

SAMPLE PROBLEM, Continued

Date Feb 2 19—

M Jerry Singer

No. 16-305

Reg. No._____ Clerk_____

1	Groceries		3	25
2				
3				
4				
5				
6				
7				
8				
9				
10				

Date Feb 2 19—

M B. G. Hancock

No.

Reg. No._____ Clerk_____

1	Pack on			
2	account		29	30
3				
4				
5	(Credit)			
6				
7				
8				
9				
10				

Date Feb 2 19—

M Archie Bunker

No. 18-329

Reg. No._____ Clerk_____

1	Groceries			50
2				
3				
4				
5				
6				
7				
8				
9				
10				

A flowchart showing the procedure for posting multiple sales with the return bar should now be introduced.

Individual sales slips should be continued for several more days' transactions.

Typical transactions might include:

SAMPLE PROBLEM, Continued

Record the following transactions beginning February 3:

February 3	Merchandise Charges	
Name	**Transactions**	**Amount**
Ralph Burns	16	$ 8.40
Remac, Inc.	17	10.00
Mary Little	18	2.15
Sue Wolf	19	4.65
Archie Bunker	20	16.85
February 4	**Merchandise Charges**	
Ralph Burns	21	3.21
Remac, Inc.	22	4.25
Mary Little	23	17.85
Sue Wolf	24	34.75
Archie Bunker	25	.70
Ralph Burns	26	10.56
Remac, Inc.	27	15.00
Thelma Williams	28	.35
Mary Little	29	12.50
Mary Little	30	11.00
Archie Bunker	31	21.00
February 5	**Merchandise Charges**	
Remac, Inc.	32	12.80
Sue Wolf	33	20.20
Archie Bunker	34	16.75
	Credits	
Ralph Burns	35	11.61
Remac, Inc.	36	4.25
Mary Little	37	20.00
Archie Bunker	38	50.05
Jerry Singer	39	12.00
Archie Bunker	40	5.75
Allan Freeman	41	39.89
William Shader	42	17.75
Remac, Inc.	43	192.16

If the teacher uses this problem, he should construct additional transactions with more source documents than are included in this sample.

PAYROLL JOURNAL (8 1/2" x 14" paper)

Prev. Earn.	Employee No. Pay Period	Hours Worked	Earnings				Deductions				Date
			Regular	Overtime	Total to date	Gross	W. Tax	FICA	1	2	

EMPLOYEES EARNINGS RECORD (8 1/2" x 11" paper)

Fixed Deductions

(Column headings and rulings same as above)

Check Number	Amt. of Check

(Continuation of above)

(Actual sizes which can be used for duplicating forms)

RULED FORMS FOR
ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE

JOURNAL (8 1/2" x 11" paper)

Old Bal.	Date	Ref.	Debit	Credit	Balance	Proof Pick-Up	Proof

LEDGER (1/2 of 8 1/2" x 14" paper)

Date	Ref.	Debit	Credit	Balance

STATEMENT (1/2 of 8 1/2" x 14" paper)

Date	Ref.	Debit	Credit	Balance
			Balance Fwd.	

(Actual sizes which can be used for duplicating forms)